

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of the Claims**

1. (Currently Amended) An RF-circuit including an amplifier and a controllable mixer, the controllable mixer having at least one mixing transistor, wherein the at least one mixing transistor is a bipolar transistor, to which mixing transistor an oscillator signal and an input signal are supplied, wherein the input signal comprises a useful signal and further signals, and wherein an output signal is produced as an output of the mixer, wherein a controller is provided, which applies a control signal to the mixing transistor as a function of the signal quality of the demodulated output signal, wherein the operating point of the at least one mixing transistor can be set by means of the control signal, ~~in which case~~ wherein the intermodulation immunity and/or the noise in the output signal can be varied as a function of the operating point of the at least one transistor, wherein the gain of the at least one mixing transistor increases and the intermodulation immunity decreases when the operating point is set such that the collector current is reduced, and wherein the gain of the at least one mixing transistor decreases and the intermodulation immunity increases when the operating point is set such that the collector current is increased, and wherein a controllable portion of the overall gain of the RF-circuit is determined by the operating point of the at least one mixing transistor.
2. (Previously Presented) The RF-circuit according to Claim 1, wherein a demodulator which is connected downstream from the mixer, and an evaluation circuit are provided for assessment of the signal quality of the demodulated output signal.
3. (Previously Presented) The RF-circuit according to Claim 2, wherein the evaluation circuit assesses the error rate of a digitally coded signal.
4. (Previously Presented) The RF-circuit according Claim 1, wherein a memory is provided for recording initial values, on the basis of which the signal quality can be assessed and optimized.

5. (Previously Presented) The RF-circuit according to Claim 4, wherein the initial values comprise information about a desired minimum signal quality, the symbol rate, the code rate, and/or the modulation method, and optimization routines for reception optimization can be selected as a function of the initial values.

6. (Currently Amended) A method of controlling a mixer in an RF circuit further comprising an amplifier and a demodulator, wherein the mixer has at least one mixing transistor, wherein the at least one mixing transistor is a bipolar transistor, to which mixing transistor an oscillator signal and an input signal are supplied, wherein the input signal comprises a useful signal and further signals, and wherein an output signal is produced as an output of the mixer, the method comprising the following steps:

- assessing the signal quality of the demodulated output signal;
- setting the operating point of the at least one mixing transistor as a function of the quality of the demodulated output signal, wherein the intermodulation immunity and/or the noise of the at least one transistor are set by means of the operating point of the at least one mixing transistor, wherein the gain of the at least one mixing transistor increases and the intermodulation immunity decreases when the operating point is set such that the collector current is reduced, and wherein the gain of the at least one mixing transistor decreases and the intermodulation immunity increases when the operating point is set such that the collector current is increased, and  
~~wherein the method is further comprised by~~
- setting a controllable portion of the overall gain of the RF-circuit by setting the operating point of the at least one mixing transistor.

7. (Previously Presented) The method according to Claim 6, wherein the error rate of a digitally coded signal is evaluated in order to assess the signal quality.

8. (Previously Presented) The method according to Claim 6, wherein initial values which are stored at the start are selected in order to assess the signal quality and in order to set the operating point of the transistor.

9. (Previously Presented) The method according to Claim 8, wherein different initial values and/or optimization routines are selected for different modulation methods, code rates and/or symbol rates.
10. (Cancelled)
11. (Previously Presented) The RF-circuit of claim 1, wherein the controllable portion of the overall gain of the RF-circuit is exclusively determined by setting the operating point of the at least one mixing transistor.
12. (Previously Presented) The method of claim 6, wherein the controllable portion of the overall gain of the RF-circuit is exclusively determined by setting the operating point of the at least one mixing transistor.